

AMERICAN MUSEUM *Novitates*

PUBLISHED BY THE AMERICAN MUSEUM OF NATURAL HISTORY
CENTRAL PARK WEST AT 79TH STREET, NEW YORK, N.Y. 10024
Number 3137, 11 pp. May 26, 1995

Homonymy, Synonymy, and New Combinations in the Miridae (Heteroptera)

I. M. KERZHNER¹ AND R. T. SCHUH²

ABSTRACT

Replacement names are proposed for newly discovered homonyms. Several genera are placed in synonymy, some genera are given new tribal as-

signments, and some species are transferred to other genera. The type species of *Brasiliocarnus* Carvalho and *Cleotomiris* Schuh are fixed.

INTRODUCTION

J. C. M. Carvalho, in his monumental world catalog of Miridae (1957–1960), noticed many homonymous species-group names and replaced the junior homonyms by junior synonyms or new replacement names. However, in some cases such corrections were not made or the earliest names were not used for replacement. Some homonyms not replaced by Carvalho were placed in synonymy or replaced in later works. Here we attempt an overview of the remaining cases not dealt with by Carvalho. Two new patronymics are proposed for the late Dr. Carvalho in recognition of his outstanding contributions to taxonomy of the Miridae. Replacement

names, new synonymy, and revised subfamily and tribal assignments are also proposed for taxa published subsequent to the Carvalho Catalogue.

REPLACEMENT GENUS-GROUP NAMES

Cearamiris nom. n. is proposed for *Cearana* Carvalho and Ferreira, 1974 [Rev. Brasileira Biol. 33 (suppl.): 133], a junior homonym of *Cearana* Jordan and Brauner, 1908 [Smithson. Misc. Collect. 52(1792): 27], Pisces. Masculine.

Candidomiris nom. n. is proposed for

¹ Department of Insect Taxonomy, Zoological Institute, Academy of Sciences, St. Petersburg, Russia 199034.

² Curator, Department of Entomology, American Museum of Natural History; Adjunct Professor, City College, City University of New York; Adjunct Professor, Department of Entomology, Cornell University, Ithaca, New York.

Kraussella Carvalho, 1987 [Rev. Brasileira Biol. 47: 180], a junior homonym of *Kraussella* Bolívar, 1909 [Bol. Soc. Esp. Hist. Nat. 9: 292], Orthoptera. Masculine.

Josifovolygus nom. n. is proposed for *Tricholygus* Josifov, 1992 [Reichenbachia 29: 108], a junior homonym of *Tricholygus* Poppius, 1910 [Swedish Zool. Exped. Kilimandjaro 2:47], Miridae. Masculine.

REPLACEMENT SPECIES-GROUP NAMES

Adelphocoris fijiensis nom. n. is proposed for *A. lateralis* Reuter, 1908 [Ann. Naturhist. Mus. Wien 22: 184] from Fiji Is., a junior secondary homonym of *Phytocoris lateralis* Fallén, 1829 [Hem. Suec.: 88] = *Adelphocoris seticornis* (Fabricius, 1775), Palearctic.

Adelphocoris sichuanus nom. n. is proposed for *A. apicalis* Reuter, 1906 [Annu. Mus. Zool. St. Petersburg 10: 9, 13] from China, a junior secondary homonym of *Phytocoris apicalis* Hahn, 1833 [Wanz. Ins. 1: 220] = *Adelphocoris seticornis* (Fabricius, 1775), Palearctic.

Calocoris poppiusi nom. n. is proposed for *Calocoris caucasicus* Poppius, 1912, *Creontiades cuacasicus* Poppius, 1912 [Ofv. Finsk. Vet. Soc. Forh. 54A(29): 6], a junior secondary homonym of *Calocoris caucasicus* Poppius, 1912 [Ofv. Finsk. Vet. Soc. Forh. 54A(29): 7], both species from the Caucasus.

Campylomma nigrifemur Wagner, 1975 [Not. Entomol. 61: 11] is the valid name for *C. pallida* (Wagner, 1957), *Sthenaropsis pallida* Wagner, 1957 [Jahresh. Ver. Vaterl. Naturkd. Württemberg 112: 94] from the southern Palearctic, a junior secondary homonym of *Campylomma pallida* Usinger, 1946 [Bull. B. P. Bishop Mus. 189: 89], from Guam.

Campylomma odhiamboi nom. n. is proposed for *Campylomma punctipes* (Odhiambo, 1959) *Sthenarus punctipes* Odhiambo, 1959 [Ann. Mag. Nat. Hist. (13)2: 435], Uganda, a junior secondary homonym of *Capsus punctipes* Herrich-Schaeffer, 1835 [Nomencl. Entomol. 1: 150] = ? *Campylomma verbasci* (Meyer-Dur, 1843), Palearctic.

Deraeocoris apicatus nom. n. is proposed for *D. apicalis* Poppius, 1915 [Arch. Naturg. 80A(8): 40], Taiwan, a junior secondary homonym of *Capsus apicalis* Signoret, 1865 [Ann. Soc. Entomol. France, ser. 4, 5: 125]

= *Deraeocoris cordiger* (Hahn, 1834), Palearctic.

Deraeocoris brunneolus nom. n. is proposed for *D. brunneus* (Poppius, 1915), *Cimicapsus brunneus* Poppius, 1915 [Ann. Mus. Natl. Hung. 13: 84] from Australia, a junior secondary homonym of *D. brunneus* Poppius, 1912 [Acta Soc. Sci. Fenn. 41(3): 120, 126], Madagascar.

Deraeocoris darjeelingensis nom. n. is proposed for *D. discoidalis* Poppius, 1915 [Ann. Mus. Natl. Hungarici 13: 80] from India, a junior secondary homonym of *Lamprolygus signatus* var. *discoidalis* Poppius, 1912 [Acta Soc. Sci. Fenn. 41(3): 113] = *Deraeocoris discoidalis* (Poppius, 1912), tropical Africa.

Deraeocoris discoidalis (Poppius, 1912), stat. n., *Lamprolygus signatus* var. *discoidalis* Poppius, 1912 [Acta Soc. Sci. Fenn. 41(3): 113] is the valid name for *D. signatoides* Carvalho, 1957 [Arq. Mus. Nac. 44: 80] from tropical Africa. Note: In renaming the preoccupied *D. signatus* (Poppius, 1912), Carvalho (1957: 80) gave it the new name *D. signatoides* instead of using the varietal name *discoidalis*.

Halticus spegazzinii Berg, 1883 [An. Soc. Cienc. Argentina 9: 74] is the valid name for *H. pygmaeus* (Berg, 1879), *Capsus pygmaeus* Berg, 1879 [Hem. Argentina, p. 290] from Argentina, a junior primary homonym of *C. pygmaeus* Zetterstedt, 1838 [Ins. Lapp., p. 279] = *Tytthus pygmaeus* (Zetterstedt, 1838), Palearctic.

Heterocordylus italicus nom. n. is proposed for *H. flavipes* Wagner, 1953 [Ann. Naturhist. Mus. Wien 59: 296] from Italy, a junior primary homonym of *H. flavipes* Nitobe, 1906 [Insect World, Gifu, 10: 19], Japan, nomen dubium. Note: In Carvalho (1958) *flavipes* Nitobe is given as *flaviceps* [sic] Matsumura.

Hyalopeplus lineifer (Walker, 1873), *Capsus lineifer* Walker, 1873 [Cat. Heteroptera Br. Mus. 6: 122] is the valid name for *H. vitripennis* (Stål, 1855), *Capsus vitripennis* Stål, 1855 [Ofv. Finsk. Vet. Soc. Forh., 12(4): 186] from Oriental and Australian Regions, a junior primary homonym of *Capsus vitripennis* Say, 1832 [Descript. Het. Hem. N. Am.: 24] = *Hyaliodes vitripennis* (Say, 1832), North America.

Lygocoris sinicus nom. n. is proposed for *Lygocoris (Apolygus) pubescens* Zheng and Wang, 1983, *Lygus (Apolygus) pubescens*

Zheng and Wang, 1983 [Entomotaxonomia 5: 48, 57], from China, a junior primary homonym of *Lygus pratensis pubescens* Reuter, 1912 [Ofv. Finsk. Vet. Soc. Forh. 54A(7): 37], = *Lygus rugulipennis* Poppius, 1911, from the Palearctic.

Lygocoris wangi nom. n. is proposed for *Lygocoris* (*Apolygus*) *signatus* Zheng and Wang, 1983, *Lygus* (*Apolygus*) *signatus* Zheng and Wang, 1983 [Entomotaxonomia 5: 48, 56], from China, a junior primary homonym of *Lygus* [now *Pinalitus*] *cervinus* form *signata* Stichel, 1930 [Illstr. Bestimmungstabellen Deut. Wanzen 6, 7: 181], from Europe.

Lygocoris zhengi nom. n. is proposed for *Lygocoris* (*Apolygus*) *marginatus* Zheng and Wang, 1983, *Lygus* (*Apolygus*) *marginatus* Zheng and Wang, 1983 [Entomotaxonomia 5: 48, 56], from China, a junior secondary homonym of *Phytocoris marginatus* Zetterstedt, 1838 [Insecta Lapponica descripta 1: 272], = *Lygocoris rugicollis* (Fallen, 1807), from the Palearctic.

Orthotylus costai nom. n. is proposed for *Orthotylus clarensis* (Carvalho, 1990), *Melanotrichus clarensis* Carvalho, 1990 [An. Acad. Brail. Cienc. 62: 395], a junior secondary homonym of *Orthotylus clarensis* Carvalho and Costa, 1990 [An. Acad. Brasil. Cienc. 62: 310], both from Brazil [see discussion of *Orthotylus* under New Combinations for this and other species of *Orthotylus*].

Orthotylus harryi nom. n. is proposed for *Orthotylus pallens* (Knight, 1968), *Melanotrichus pallens* Knight, 1968 [Brigham Young Univ. Sci. Bull., Biol. Ser., 11(3): 125], from western USA, a junior secondary homonym of *Orthotylus pallens* (Matsumura, 1911), *Calocoris pallens* Matsumura, 1911 [J. Coll. Agric. Tokyo Imp. Univ., Sapporo 4: 39], from Sakhalin Island.

Orthotylus hazeltoni nom. n. is proposed for *Orthotylus uniformis* (Knight, 1968), *Melanotrichus uniformis* Knight, 1968 [Brigham Young Univ. Sci. Bull., Biol. Ser., 11(3): 128], from western USA, a junior secondary homonym of *Orthotylus uniformis* Van Duzee, 1916 [Proc. California Acad. Sci., 4th ser., 6(5): 100], from California.

Orthotylus leonardi nom. n. is proposed for *Orthotylus elongatus* (Kelton, 1980) *Melanotrichus elongatus*, Kelton [Can. Entomol. 112: 338], from Canada, a junior secondary

homonym of *Orthotylus elongatus* Wagner, 1965 [Reichenbachia 6: 67], from Cyprus.

Orthotylus subtropicalis nom. n. is proposed for *Orthotylus missionensis* (Carvalho and Carpintero, 1986), *Melanotrichus missionensis* Carvalho and Carpintero, 1986 [Rev. Brasileira Biol. 46: 619], a junior secondary homonym of *Orthotylus missionensis* Carvalho 1985 [Rev. Brasileira Biol. 45: 280], both from Argentina.

Orthotylus josei nom. n. is proposed for *Orthotylus cuneatus* Carvalho, 1985 [Rev. Brasileira Biol. 45: 277], from Argentina, junior primary homonym of *Orthotylus cuneatus* Van Duzee, 1916 [Proc. California Acad. Sci. (4)6: 117], from California.

Phoenicocoris knighti nom. n. is proposed for *Phoenicocoris pini* Knight, 1968, *Lepidopsallus pini* Knight, 1968 [Brigham Young Univ. Sci. Bull., Biol. Ser., 9: 53; see Stone-dahl, 1990, Bull. Amer. Mus. Nat. Hist. 198: 14], from western USA, a junior secondary homonym of *Atractotomus pini* Fieber, 1864 [Wien. Entomol. Monatschr. 8: 224], = *Phoenicocoris obscurellus* (Fallen, 1829), from the Palearctic.

Phytocoris femoratus nom. n. is proposed for *P. femoralis* Fieber, 1861 [Eur. Hem.: 260] from the Mediterranean, a junior primary homonym of *P. femoralis* Lucas, 1849 [Expl. Alg.: 82] = *Calocoris fulvomaculatus* (De Geer, 1773), Palearctic.

Phytocoris jorigtooi nom. n. is proposed for *Phytocoris desertorum* Nonnaizab and Jorigtoo, 1992 [Zool. Res. 13: 318, 322], from China, a primary homonym of *Phytocoris desertorum* Reuter, 1900 [Ofv. Finsk. Vet. Soc. Forh. B 42: 251], from North Africa.

Phytocoris leucopterus nom. n. is proposed for *P. albipennis* Reuter, 1904 [Ofv. Finsk. Vet. Soc. Forh., 47(4): 3] from Israel, a junior primary homonym of *P. albipennis* Fallén, 1829 [Hem. Suec., p. 107] = *Plagiognathus albipennis* (Fallén, 1829), Holarctic.

Phytocoris marmoratus Blanchard, 1852, in Gay [Hist. Fis. Polit. Chile, 7: 194] is the valid name for *P. chilensis* Carvalho, 1955 [Rev. Chilena Entomol. 4: 225] from Chile. **Note:** In renaming the preoccupied *P. adspersus* Spinola, 1852, Carvalho (1955) gave it a new name *P. chilensis*, instead of using the synonymic name *P. marmoratus*.

Phytocoris nonnaizabi nom. n. is proposed for *Phytocoris procerus* Nonnaizab and Jo-

rigtoo, 1992 [Zool. Res. 13: 314, 321], from China, a junior primary homonym of *Phytocoris procerus* Linnavuori, 1975 [Acta Zool. Fenn. 12: 21], from Ethiopia.

Phytocoris raunoi nom. n. is proposed for *Phytocoris irroratus* Linnavuori, 1965 [Acta Entomol. Fenn. 21: 51], from Turkey, a junior primary homonym of *Phytocoris irroratus* Blanchard, 1852, Hemipteros, in Gay [Hist. Fis. Polit. Chile 7: 193], from Chile.

Phytocoris somersojae nom. n. is proposed for *Phytocoris artemisiae* Linnavuori, 1984 [Acta Entomol. Fennica 44: 22], from Iraq, a junior primary homonym of *P. artemisiae* Schilling, 1837 [Uebers. Arbeit. Verand. Schles. Ges. Vaterl. Kultur. 1836: 84] = *Lygus gemellatus* (Herrich-Schaeffer, 1835), Palearctic.

Phytocoris stonedahli nom. n. is proposed for *Phytocoris hispidus* Stonedahl, 1988 [Bull. Am. Mus. Nat. Hist. 188: 144], from southwestern US, a junior primary homonym of *Phytocoris hispidus* Linnavuori, 1986 [Fauna Saudi Arabia 8: 135], from Saudi Arabia.

Polymerus vegatus (Van Duzee, 1933) *Poeciloscytus vegatus* Van Duzee, 1933 [Proc. California Acad. Sci., ser. 4, 21: 28] is the valid name for *P. nigrutilus* (Walker, 1873) *Capsus nigrutilus* Walker, 1873 [Cat. Het. Br. Mus., 6: 112] from Galapagos Is., a junior primary homonym of *Capsus nigrutilus* Zetterstedt, 1838 [Ins. Lapp.: 279] = *Mecomma ambulans* (Fallén, 1807), Palearctic.

Psallus michaili nom. n. is proposed for *Psallus niger* Josifov, 1992 [Reichenbachia 29: 113], from Korea, a junior primary homonym of *Psallus graminicola* f. *niger* Stichel, 1956 [Illustr. Bestimmungstabellen Deut. Wanzen 16: 283], from the northern Palearctic.

Saturniimiris lugens (Walker, 1873), *Capsus lugens* Walker, 1873 [Cat. Het. Br. Mus., 6: 199] is the valid name for *S. tristis* (Walker, 1873), *Capsus tristis* Walker, 1873 [Cat. Het. Br. Mus., 6: 125] from New Guinea, a junior primary homonym of *Capsus tristis* Scholtz, 1847 [Arb. Veränd. Schles. Ges. Vaterl. Kult., 1846: 137] from Poland, a nomen dubium. **Note:** *Capsus lugens*, a new replacement name proposed by Walker himself, was overlooked in later works.

We do not propose new replacement names for two junior primary homonyms:

Capsus punctipes Mulsant et Rey, 1852 [Ann. Soc. Linn. Lyon 1850–1852: 123] from France, a nomen dubium, is a primary homonym of *C. punctipes* Herrich-Schaeffer, 1835 [Nomencl. Entomol. 1: 150] = ? *Campylomma verbasci* (Meyer-Dur, 1843).

Polymerus pallescens (Walker, 1873), *Capsus pallescens* Walker, 1873 [Cat. Het. Br. Mus., 6: 94] from Canada is a junior primary homonym of *Capsus pallescens* Herrich-Schaeffer, 1835 [Nomencl. Entomol. 1: 49] from Europe, a nomen dubium, but as *P. pallescens*, known from original description only, is probably identical with some other species of *Polymerus* from Canada, we regard renaming to be superfluous.

NEW AND REVISED SYNONYMY AND REVISED STATUS

Aoplonema Knight, 1928

Aoplonema Knight, 1928: 177. **revised status**

Aoplonema Knight, proposed as a subgenus, has subsequently been treated as such. We elevated the group to generic status on the basis of the obvious differences between the species placed in it and *Hadronema* Uhler, including the structure of the male genitalia and other structural features. Included species are: *echinatum*, Gruetzmacher and Schaffner, 1977; *festivum* Van Duzee, 1910; *princeps* Uhler, 1894; *uhleri* Van Duzee, 1928; and *uniforme* Knight, 1928.

Deraeocoris Kirschbaum, 1856

Deraeocoris Kirschbaum, 1856: 191, 208.

Cimicicapsus Poppius, 1915: 41. **new synonym**

Type specimens of all three species placed by Poppius in *Cimicicapsus* were obtained from the Zoological Museum in Helsinki for examination (the holotype of *C. brunneus* Poppius is badly damaged and represented by fragments only). These species form a natural group that also includes *Deraeocoris koreanus* Linnavuori, as characterized by the dense vestiture of the hemelytra and some other characters. Because they are so similar to representatives of the large and variable genus *Deraeocoris*, recognition of a separate genus for them is unwarranted. The new combinations created by this action are: *D.*

brunneus (Poppius, 1915), *D. elongatus* (Poppius, 1915), and *D. parviceps* (Poppius, 1915). The first of these names becomes a junior secondary homonym, and a new replacement name, *Deraeocoris brunneolus*, is proposed for it.

Leptidolon Reuter, 1904

Leptidolon Reuter, 1904: 14. **revised synonym**

Carvalho (1952: 65) synonymized *Leptidolon* Reuter with *Plagiognathus* Fieber without comment. Based on the known distribution of *Plagiognathus*, there is every reason to believe that the similarity between *Leptidolon vittipenne* Reuter and *Plagiognathus* spp. is superficial, and we are therefore removing the genus from synonymy.

Platyscytus Reuter, 1907

Platyscytus Reuter, 1907: 16.

Amazonophilus Carvalho and Costa, 1992: 203. **new synonym**

Carvalho and Costa (1992) described *Amazonophilus* with the single included species *A. bipunctatus* Carvalho and Costa. Judging from the habitus figure and illustrations of the male genitalia, *bipunctatus* is a species of *Platyscytus*, and we are so treating it.

Rhinacloa Reuter, 1876

Rhinacloa Reuter, 1876: 88.

Sinopmiris Carvalho, 1991: 92. **new synonym**

Carvalho (1991) described *Sinopmiris* with the single included species *S. clarus* Carvalho. Judging from the description and the figures of the male genitalia, this is a species of *Rhinacloa* Reuter, and we are so treating it.

Sejanus Distant, 1910

Sejanus Distant, 1910: 20.

Eosthenarus Poppius, 1915: 72 (n. gen.). **revised synonym**

Poppius (1915) described the genus *Eosthenarus* from Taiwan, designating *E. crassicornis* Poppius, 1915, as the type species. Carvalho (1952) placed *Eosthenarus* in synonymy with *Chlamydatus* Curtis. Our examination of the type specimen of *crassicornis* in the Zoological Museum, Helsinki, in-

dicates that it is actually a species of *Sejanus* Distant. Thus, *Eosthenarus* becomes a junior synonym of *Sejanus*.

Examination of the type specimens of *Sthenarus interruptus* Reuter, 1906 [Annu. Mus. Zool. St. Petersburg 10: 79] and *S. niveoarcuatus* Reuter, 1906 [Annu. Mus. Zool. St. Petersburg 10: 80] indicates that they belong to *Sejanus*, **new combinations**.

Xenofulvius Bergroth, 1920

Xenofulvius Bergroth, 1920: 79. **revised synonym**

Carvalho (1952: 76) synonymized *Xenofulvius* Bergroth with *Ceratocapsus* Reuter without comment. Based on the known distribution of *Ceratocapsus*, there is every reason to believe that the similarity between *Xenofulvius firmicornis* Bergroth and *Ceratocapsus* spp. is superficial, and we are therefore removing the genus from synonymy.

Atomoscelis modestus (Van Duzee)

Tuponia modesta Van Duzee, 1914: 30 (n. sp.).

Atomoscelis modestus: Van Duzee, 1917: 414 (n. comb.).

Mineocapsus mineatus Knight, 1972: 425 (n. sp.). **new synonym**

Van Duzee (1914) described *Atomoscelis modestus* from California. We have examined many specimens identified as *modestus* and compared this species with *A. onustus* Fieber, 1861 (type species of *Atomoscelis*) from the Palearctic; the two are clearly very closely related. Knight (1972) described *Mineocapsus mineatus* on the basis of specimens from Utah. They are clearly conspecific with specimens from Knight's collection identified as *modestus*. We are therefore treating *mineatus* as a junior synonym. *Mineocapsus* Knight, 1972, becomes a junior synonym of *Atomoscelis* Reuter, 1875, **new synonym**.

Opuna annulata (Knight)

Campylomma annulatus Knight, 1935: 197 (n. sp.).

Parargmus annulicornis Poppius, 1911: 35 (n. sp.). **new synonym**

Parargmus ceylonensis Carvalho, 1955: 225 (n. name). **new synonym**

Pararagmus lindbergi Kiritschenko, 1961: 444 (unnecessary new name). **new synonym**
Reuteriolo annulicornis Hsiao in Hsiao and Meng, 1963: 445, 449. **new synonym**
Opuna annulatus: Schuh, 1984: 401 (n. comb.).

Comparison of specimens of *Opuna annulata* (Knight) with the original description of *Pararagmus annulicornis* Poppius, (= *P. ceylonensis* Carvalho, 1955) indicates that the two are synonyms. Because *annulicornis* Poppius was replaced as a junior secondary homonym before 1960, this name cannot be used, and, *annulata* Knight becomes the valid name for this species. Because *annulicornis* Poppius is the type species of the genus, *Pararagmus* Poppius, 1911, that genus becomes a junior synonym of *Opuna* Kirkaldy, 1902, **new synonym**.

Evaluation of the original description of *Reuteriolo annulicornis* Hsiao, 1963, indicates that this taxon is also synonymous with *annulata* Knight. Consequently, *Reuteriolo* Hsiao becomes a junior synonym of *Opuna* **new synonym**.

Parapsallus vitellinus (Scholtz)

Capsus vitellinus Scholtz, 1847: 130 (n. sp.).
Parapsallus vitellinus: Kerzhner, 1964: 760 (n. comb.).
Parapsallus wagneri Rozhkov and Volkova, 1966: 59 (n. sp.). **new synonym**

Rozhkov and Volkova (1966) under the heading "*Parapsallus wagneri* Kulik, sp. n. (in lit.)" published a short description and figures of a mirid common on *Larix sibirica* in East Siberia (Cisbaikalia). The authors stated that the species was determined as new by S. A. Kulik and his identification confirmed by E. Wagner, although Kulik in his later publications on Siberian Heteroptera used the name *P. vitellinus*, and not *P. wagneri*. Judging from some of the characters mentioned (two cells of membrane, four segments of antennae) the description of *P. wagneri* was made by Rozhkov and Volkova and the name should be credited to them. In our opinion, the Siberian specimens of *Parapsallus* do not differ from European specimens, and the name *P. wagneri* should be placed in synonymy of the widely distributed *P. vitellinus*.

Phylloidea picta (Uhler)

Bolteria picta Uhler, 1893: 373 (n. sp., desc.).
Europiella concinna Reuter, 1909: 84 (n. sp., desc.). **new synonym**
Hyoidea picta Reuter, 1909: 72 (note).
Bolteria picta hirta Van Duzee, 1916: 244 (n. var.). **new synonym**
Phylloidea hirta Knight, 1920: 127 (n. comb, note).
Phylloidea picta Knight, 1920: 127 (note, n. comb., lectotype designation).
Phylloidea utahensis Knight, 1968: 32 (n. sp., desc., host). **new synonym**

Lectotype: ♀, Am. Fork, Ut., 22.6.91; deposited in the USNM.

Lectotype of Synonym: *Bolteria picta hirta* Van Duzee: ♀, G. Alpine Cr., 7-5-15, Tahoe Cal., E. P. Van Duzee Collector; deposited in the CAS.

Holotypes of Synonyms: *Europiella concinna* Reuter: ♀, Claremont, Cal., Baker; deposited in the Helsinki Museum. *Phylloidea utahensis* Knight: ♂, Scipio, UTAH, June 29, 1965, H. H. Knight; deposited in the USNM.

Discussion: Comparison of the lectotypes of *Bolteria picta* Uhler, *Bolteria picta hirta* Van Duzee, and the holotypes of *Europiella concinna* Reuter and *Phylloidea utahensis* Knight indicates that all four are conspecific; *picta* has priority.

Van Duzee described the subspecies *picta hirta* from "eight female examples beaten from sagebrush (*Artemisia*) [sic] on the shore of Fallen Leaf Lake near the Lodge on July 5." We received on loan one specimen labeled as the lectotype and nine additional specimens labeled as paratypes from the California Academy of Sciences. Despite the labels, there is apparently no published lectotype designation for this taxon, so we have affixed lectotype and paralectotype labels to eight of the specimens.

Pseudoloxops coccineus (Meyer-Dur, 1843)

Capsus coccineus Meyer-Dur, 1843: 75.
Capsus miniatus Parfitt, 1865: 130. **new synonym**

Capsus miniatus Parfitt was described from one specimen collected at Exeter (England). The name is a junior primary homonym of *C. miniatus* Herrich-Schaeffer, 1838 [Wanz.

Ins. 4: 34] which is a junior synonym of *Der-aeocoris schach* (Fabricius, 1781). The above synonymy is clear from Parfitt's description and was apparently known to British authors because Saunders (1892: 294) cited "Exeter, Parfitt" in distribution of "*Loxops coccineus*." However, we are unable to find any mention of Parfitt's name in synonymy and are forced to establish the synonymy as new.

NEW COMBINATIONS

Badezorus annulicornis (Reuter), new combination

Plagiognathus annulicornis Reuter, 1879: 298 (n. sp.).

Parargmus subsinuatus Poppius, 1912: 25 (n. sp.).

Parargmus annulicornis: Kiritshenko, 1926: 226 (n. comb., syn.).

Our examination of the male genitalia of *Plagiognathus annulicornis* Reuter indicates that the vesica has a very long single terminal spine of the type found in *Badezorus signaticornis* (Reuter, 1904). The species is closely related if not synonymous with *Chamaep-sallus tomentosus* (Reuter, 1904), which was transferred to *Badezorus* by Linnavuori (1993a).

Michailocoris chinensis (Hsiao), new combination

Aretas chinensis Hsiao, 1941: 245 (n. sp.).

Pseudoloxops chinensis: Carvalho, 1958: 127 (n. comb.).

The only material mentioned in the original description of *A. chinensis* was a female holotype, but male genitalia were figured. In the U.S. National Museum the species is represented by one male labeled by Hsiao himself as "allotype" but possibly being the holotype. Examination of this specimen shows that the species was wrongly placed by Hsiao in the genus *Aretas* Distant (junior synonym of *Pseudoloxops* Kirkaldy), Orthotylinae, and belongs in fact to the genus *Michailocoris* Stys, Bryocorinae, Eccritotarsini. *Michailocoris chinensis* is similar to *M. josifovi* Stys (Korea, Far East of Russia), but differs from it in having relatively larger eyes and in having the coloration of the clavus in the male similar to that in the *M. josifovi* female.

Orthotylus Fieber, 1858

Orthotylus Fieber, 1858: 315.

Melanotrichus Reuter, 1875: 151.

Melanotrichus Reuter has been treated as a subgenus of *Orthotylus* or as a genus, depending on the author. It has also been treated as a synonym of *Orthotylus*. Several authors have recently described new species of Orthotylinae in *Melanotrichus*. In our view these generic assignments are poorly founded because no characters will consistently allow for recognition of *Melanotrichus* and its distribution clearly suggests an unnatural assemblage. We therefore prefer to treat these species as members of a more broadly construed *Orthotylus* until such time as more comprehensive studies are conducted on the generic classification of *Orthotylus* and its near relatives—recognizing that *Orthotylus* is also clearly not monophyletic. The new combinations created by this action are: *O. argentinus* Carvalho, 1985; *O. minensis* Carvalho, 1985; *O. saltensis* Carvalho, 1985; *O. clarensis* Carvalho, 1990; *O. bonaerensis* Carvalho and Carpintero, 1986; *O. missionensis* Carvalho and Carpintero, 1986; *O. sumaloensis* Carvalho and Carpintero, 1986; *O. vermelhensis* Carvalho and Costa, 1992; *O. joacemensis* Carvalho and Costa, 1992; *O. membranous* Carvalho and Costa, 1992; *O. elongatus* Kelton, 1980; *O. pallens* Knight, 1968; and *O. uniformis* Knight, 1968. Five of these names—*clarensis*, *elongatus*, *missionensis*, *pallens*, and *uniformis*—become secondary homonyms as a result of their transfer to *Orthotylus*. We propose replacement names above.

A final case involves *Dichaetocoris brevirostris* Knight, 1968 [Brigham Young Univ. Sci. Bull., Biol. Ser., 9: 115], which was later transferred to *Melanotrichus* by Polhemus, 1985 [Pan-Pac. Entomol. 61: 149]. Because of the resulting secondary homonymy with *M. brevirostris* Knight, 1927 (transferred by Kelton in 1978 to *Brooksetta* Kelton), Polhemus proposed the replacement name *M. knighti*. The replacement name was unnecessary because the two taxa were not considered synonymous (International Code of Zoological Nomenclature, Article 59a).

FIXATION OF TYPE SPECIES

Brasiliocarnus Kerzhner and Schuh

Brasiliocarnus Carvalho, 1984: 377.

Carvalho (1984) proposed the name *Brasiliocarnus* with two included species, but failed to designate a type species. In the Zoological Record for 1985 [ZR, 1987, pt. 13F: 197], *B. bahiensis* was indicated as the type, but because this fixation is anonymous it is invalid. The type of the genus is here designated as *Brasiliocarnus fraudans* Stal, 1860 [K. Vet. Akad. Handl. 2(7): 52].

Cleotomiris Schuh

Cleotomiris Schuh, 1984: 81.

Schuh (1984) proposed the name *Cleotomiris* with four included species. For reasons not now obvious, no type species was designated. The type of the genus is here designated as *Cleotomiris schneirlai* Schuh, 1984. This nomenclatural act, which makes the name available, should be credited to Schuh (this paper).

REVISED HIGHER-CATEGORY
PLACEMENTS*Dicyphopsis* Poppius, 1914

Dicyphopsis Poppius, 1914: 11.

Dicyphopsis, with the single included species *D. nigriceps* Poppius, 1914, was described from one female specimen collected in Tanzania (Kilimandjaro) and placed in the Macrolophinae (now Dicyphina) by its author. The holotype was completely destroyed on shipment from the Naturhistoriska Riksmuseet, Stockholm, to G. Cassis (Cassis, 1986). We have examined specimens in the American Museum of Natural History considered by us to be congeneric, but not conspecific, with *D. nigriceps* specimens collected in Zaire by N. A. Weber (Stanleyville, March 18, 1948) and Ghana by R. T. Schuh and J. A. Slater (Tafo, October, 5, 1967; many males and females). These specimens fit the original description in all details except that the dorsal vestiture is pale (not dark), antennal segment 1 lacks a longitudinal ventroapical dark stripe, and segment 2 is completely

black (rather than pale) with a longitudinal dark stripe on the apical half as in *nigriceps*. Furthermore, these specimens do not have what might be considered a typical habitus for the Halticini; they are elongate, macrop-terous in both sexes with semitransparent hemelytra, and have a well-delimited pronotal collar and slender hind femora. They do, however, have typical halticine male genitalia, with the right paramere spoon-shaped, the left paramere 7-form, and the aedeagus without a vesica and spines. Based on these observations we transfer *Dicyphopsis* to the Halticini.

A second species placed in *Dicyphopsis*, *D. spectabilis* Linnavuori, 1975 (holotype examined), does not fit the original description of the genus in many significant details. The eyes are granulose, not touching the anterior margin of the pronotum (contrary to Linnavuori's description), and much wider than the vertex (in *Dicyphopsis* half as wide). The large cell of the membrane forms a marked angle whereas in *Dicyphopsis* it is broadly rounded, and the color pattern is strongly dissimilar to that of *D. nigriceps*. Cassis (1986) examined two specimens of the type series and stated that they strongly resemble *Campyloneuropsis* Poppius. We agree with his conclusions and place *spectabilis* Linnavuori in *Campyloneuropsis*.

Ifephyllus Linnavuori, 1993

Ifephyllus Linnavuori, 1993b: 207.

Linnavuori placed his new genus *Ifephyllus* in the Pilophorini solely on the basis of pretarsal structure. Based on the structure of the male genitalia, we treat this taxon as belonging to the Phylini.

Mendozaphylus

Carvalho and Carpintero, 1991

Mendozaphylus Carvalho and Carpintero, 1991b: 201.

Carvalho and Carpintero (1991b) placed *Mendozaphylus* in the Hallodapini. Based on the description and habitus figure and illustrations of the male genitalia of the single included species, we are placing this taxon in the Phylini. No true Hallodapini have been

previously documented from the Neotropics, and this one lacks the distinctive genitalia of the Old World taxa and *Cyrtopeltocoris* Reuter from North America.

Opisthocoris

Carvalho and Costa, 1991

Opisthocoris Carvalho and Costa, 1991: 206. revised family placement

Carvalho and Costa (1991) placed *Opisthocoris*, with its single included species *O. carmelitanus* Carvalho and Costa, 1991, in the Stenodemini. Based on the habitus figure and illustrations of the pretarsus, we do not believe this taxon belongs to the Miridae, but rather to the Lygaeidae, Cyminae. Examination of specimens will be necessary to more precisely determine its identity.

Tibiopilus

Carvalho and Costa, 1993

Tibiopilus Carvalho and Costa, 1993: 207.

Carvalho and Costa (1993) placed *Tibiopilus* in the Hallodapini. Based on the description of the pronotal collar as "deprimido" (depressed) as well as the habitus figure and the illustrations of the male genitalia of the single included species *T. pedunculatus* Carvalho and Costa, we are transferring this taxon to the Phylini. No Hallodapini have been documented from the neotropics, and *Tibiopilus* appears to lack the diagnostic features of the group.

REFERENCES

- Bergroth, E.
1920. List of the Cylapinae (Hem., Miridae) with descriptions of new Philippine forms. *Ann. Soc. Entomol. Belgique* 60: 67–83.
- Carvalho, J. C. M.
1952. On the major classification of the Miridae (Hemiptera). (With keys to subfamilies and tribes and a catalogue of the world genera). *An. Acad. Brasileira Cienc.* 24: 31–110.
1955. *Analecta Miridologica*: miscellaneous observations in some American museums and bibliography. *Rev. Chilena Entomol.* 4: 221–227.
1957–60. Catalogue of the Miridae of the world, Parts 1–5. *Arq. Mus. Nac. Rio de Janeiro* 44: 1–158; 45: 1–216; 47: 1–161; 48: 1–384; 51: 1–194.
1984. Mirideos neotropicaes, CCL: generos e especies do complexo *Pseudocarnus-Antias-Carmelus* (Hemiptera). *Rev. Brasileira Biol.* 44: 377–386.
1985. Mirideos Neotropicaes, CCLIII: Descricoes de novos generos e especies da tribo Orthotylini Van Duzee (Hemiptera). *Ibid.*, 45: 249–298.
1991. Mirideos neotropicaes, CCCXIII: dois generos novos da tribo Phylini Douglas and Scott (Hemiptera). *Bol. Mus. Paraense Emilio Goeldi, nova serie, Zool.* 6: 89–94 (1990).
- Carvalho, J. C. M., and D. L. Carpintero
1986. Mirideos neotropicaes, CCLXXIII: descricoes de um novo genero & treze especies novas da Republica Argentina (Hemiptera). *Rev. Brasileira Biol.* 46: 607–625.
- 1991a. Miridos neotropicaes CCCXLVI: descricao de un genero y siete especies nuevas de las subfamilia Orthotylinae, con notas y correcciones taxonomicas (Hemiptera). *An. Acad. Brasileira Cienc.* 63: 33–42.
1991b. Mirideos neotropicaes, CCCXLVII: novos generos e especies da Republica Argentina (Hemiptera). *Ibid.*, 63: 201–204.
1992. Mirideos neotropicaes, CCCXXXVII: descricao de doce especies novas de Orthotylinae (Hemiptera). *Rev. Brasileira Biol.* 51: 763–780 (1991).
- Carvalho, J. C. M., and L. A. A. Costa
1991. Mirideos neotropicaes, CCCL: sobre un genero e especie curiosa de Carmo do Rio Claro, Minas Gerais (Hemiptera). *An. Acad. Brasileira Cienc.* 63: 205–207.
1992. Mirideos neotropicaes, CCCXXXVIII: novo genero e especies de Mirinae e novas especies de Orthotylinae (Hemiptera). *Rev. Brasileira Biol.* 52: 199–207.
1993. Mirideos neotropicaes, CCCLXXVII: dois generos e especies de Phylinae (Hemiptera). *An. Acad. Brasileira Cienc.* 65: 203–207.
- Cassis, G.
1986. A systematic study of the subfamily Dicyphinae (Heteroptera: Miridae). *Ann Arbor, Univ. Microfilms*, 400 pp. [Ph.D.

- dissertation, Oregon State Univ. 1984; indexed by the Zool. Record, 1988].
- Distant, W. L.
1910. Descriptions of Oriental Capsidae. *Ann. Mag. Nat. Hist.* (8)5: 10–22.
- Fieber, F. X.
1858. Kriterien zur generischen Theilung der Phytocoriden (Capsidae auct.). *Wien. Entomol. Monatschr.* 2: 289–327, 329–347, 388.
- Hsiao, T. Y.
1941. Some new species of Miridae (Hemiptera) from China. *Iowa State Coll. J. Sci.* 15: 241–251.
- Hsiao, T.-y., and H.-l. Meng
1963. The plant-bugs collected from cotton fields in China (Hemiptera, Heteroptera, Miridae). *Acta Zool. Sinica* 15: 439–449.
- Kerzhner, I. M.
1964. Family Miridae. In G. Ya. Bei-Bienko (ed.), *Keys to the insects of the European USSR*. pp. 700–765. Leningrad, Nauka. [In Russian].
- Kiritshenko, A. N.
1926. Beiträge zur Kenntnis palaearktischer Hemipteren. *Konowia* 5: 57–63, 218–226.
1961. Synonymical notes on Heteroptera. *Acta Entomol. Mus. Natl. Pragae* 34: 443–444.
- Kirschbaum, C. L.
1856. Rhynchographische Beiträge. I. Cap-sinen der Gegend von Wiesbaden. *Jahrb. Vereins Naturkd. Herz. Nassau* 10: 153–348.
- Knight, H. H.
1928. Key to the species of *Hadronema* Uhler with descriptions of five new species (Hemiptera, Miridae). *Can. Entomol.* 60: 177–182.
1920. The genus *Bolteria* Uhler (Hemiptera-Miridae). *Bull. Brooklyn Entomol. Soc.* 14: 126–128.
1935. Insects of Samoa. Part II, Hemiptera, Miridae and Anthocoridae 5: 193–228, British Museum of Natural History.
1968. Taxonomic review: Miridae of the Nevada test site and the western United States. *Brigham Young Univ. Sci. Bull. Biol. Ser.* 9: 282 pp.
1972. *Mineocapsus minimus* new genus and new species, with a length of one millimeter this insect is a candidate for the smallest species in family Miridae (Hemiptera). *Iowa State J. Sci.* 46: 425–427.
- Linnavuori, R.
1993a. Hemiptera of Iraq. III. Heteroptera, Miridae (Phylinae). *Entomol. Fenn.* 4: 253–271.
- 1993b. The Phylinae (Hemiptera: Miridae) of west, central and northeast Africa. *Garcia de Orta Ser. Zool.* 18: 115–296.
- Meyer-Dur, L. R.
1843. Verzeichnis der in der Schweiz einheimischen Rhynchoten (Hemiptera Linn.). Erstes Heft. Die Familie der Capsini. Solothurn: Jent und Gassmann, X + 11–116 + IV pp., 7 pls.
- Parfitt, E.
1865. Description of a hemipterous insect (*Capsus miniatus*) new to science. *Entomol. Mon. Mag.* 2(18): 130.
- Poppius, B.
1910. 12. Hemiptera. 4 Miridae, Anthocoridae, Termatophylidae, Microphysidae, und Nabidae. pp. 25–60. In *Wissenschaftliche Ergebnisse der schwedischen zoologischen Expedition nach dem Kilimandjaro, dem Meru und den umgebenden Massaisteppen Deutsch-Ostafrikas 1905–1906 unter Leitung von Prof. Dr. Yngve Sjostedt*. Vol. 2. Parts 8–14. Stockholms, Palmqvist.
1911. Beiträge zur Kenntnis der Miriden-Fauna von Ceylon. *Ofv. Finsk. Vet. Soc. Forh.* 53A(2): 1–36.
1912. Neue Miriden aus dem Russischen Reiche. *Ibid.*, 54A(29): 1–26.
1914. Die Miriden der Äthiopischen Region II- Macrolophinae, Heterotominae, Phylinae. *Acta Soc. Sci. Fenn.* 44(3): 136 pp.
1915. H. Sauter's Formosa-Ausbeute: Nabidae, Anthocoridae, Termatophylidae, Miridae, Isometopidae und Ceratocombidae (Hemiptera). *Arch. Naturg.* 80A(8): 1–80 (1914) (March 1915).
- Reuter, O. M.
1875. Hemiptera Gymnocerata Scandinaviae et Fenniae disposuit et descripsit. Cimicidae (Capsina). *Acta Soc. Fauna Flora Fenn.* 1: 1–206.
1876. Capsinae ex America Boreali in Museo Holmiensi asservatae, descriptae. *Ofv. Finsk. Vet. Akad. Forh.* 32(9): 59–92 (1875), (Sep. 1876).
1879. Hemiptera Gymnocerata Europae. Hémiptères Gymnocerates d'Europe, du bassin de la Méditerranée et de l'Asie Russe. II. *Acta Soc. Sci. Fenn.* 1885: 193–312, 5 pls. (Sep. 1879).
1904. Ad cognitionem Capsidarum Australiae. *Ofv. Finsk. Vet. Soc. Forh.* 47(5): 16 pp., 1 pl.
1907. Capsidae novae in insula Jamaica mense

- Aprilis 1906 a D. E. P. Van Duzee collectae. *Ibid.*, 49(5): 27 pp.
- Reuter, O. M.
1909. Bemerkungen über nearktische Capsiden nebst Beschreibung neuer Arten. *Acta Soc. Sci. Fenn.* 36(2): 86 pp.
- Rozhkov, A. S., and L. V. Volkova
1966. Order Hemiptera, pp. 58–60. In A. S. Rozhkov (ed.), *Vrediteli listvennitsy sibirskoi* [Pests of *Larix sibirica*]. 328 pp. Moscow, Nauka. [In Russian]
- Saunders, E.
1892. The Hemiptera Heteroptera of the British Islands. A descriptive account of the families, genera, and species indigenous to Great Britain and Ireland, with notes on the localities, habitats etc. 350 pp., 32 pls. London: Reeve.
- Scholtz, H.
1847. Prodrömus zu einer Rhynchoten-Fauna von Schlesien. Uebers. Arb. Verand. Schles. Ges. Vaterl. Kult. 1846: 104–164.
- Schuh, R. T.
1984. Revision of the Phylinae (Hemiptera, Miridae) of the Indo-Pacific. *Bull. Am. Mus. Nat. Hist.* 177(1): 1–476.
- Stichel, W.
1957. Illustrierte Bestimmungstabellen der Wanzen. II. Europa (Hemiptera-Heteroptera Europae). Fasc. 16–22, pp. 481–704. Berlin: Hermsdorf.
- Uhler, P. R.
1893. Summary of the collections secured by Mr. E. A. Schwartz in Utah. *Proc. Entomol. Soc. Washington* 2: 366–385.
- Van Duzee, E. P.
1914. A preliminary list of the Hemiptera of San Diego County, California. *Trans. San Diego Soc. Nat. Hist.* 2: 1–57.
1916. Notes on some Hemiptera taken near Lake Tahoe, California. *Univ. California Pub. Entomol., Tech. Bull.* 1: 229–249.
1917. Catalogue of the Hemiptera of America north of Mexico (excepting the Aphididae, Coccidae, and Aleurodidae). *Univ. California Pub. Tech. Bull. Entomol.* 2: xiv + 902 pp.

Recent issues of the *Novitates* may be purchased from the Museum. Lists of back issues of the *Novitates*, *Bulletin*, and *Anthropological Papers* published during the last five years are available free of charge. Address orders to: American Museum of Natural History Library, Department D, Central Park West at 79th St., New York, N.Y. 10024. TEL: (212) 769-5545. FAX: (212) 769-5009. E-MAIL: scipubs@amnh.org